Amendments To The Claims:

Please amend the claims as shown.

1 – 30 (canceled)

31. (new) A steam turbine component suitable for use at temperatures up to 850°C, comprising:

a base component;

a ceramic thermal barrier coating applied to the base component; and

a metallic erosion-resistant layer applied to the thermal barrier coating, the erosion resistant layer having a lower porosity than the thermal barrier coating.

32. (new) The component as claimed in claim 31, wherein the erosion-resistant layer is selected from the group consisting of: tungsten carbide, chromium carbide and nickel.

33. (new) The component as claimed in claim 31, wherein the erosion-resistant layer is chromium carbide with an admixture of nickel.

34. (new) The component as claimed in claim 31, wherein the erosion-resistant layer is a mixture of chromium carbide and nickel-chromium.

35. (new) The component as claimed in claim 31, wherein the erosion-resistant layer is nickel-chromium with admixtures of silicon and boron, or nickel-aluminum.

36. (new) The component as claimed in claim 31, wherein the component is a housing component of a gas or steam turbine.

37. (new) The component as claimed in claim 36, wherein the housing component is a turbine housing, a valve housing or a steam inflow region housing component.

38. (new) The component as claimed in claim 31, wherein the component is a turbine blade or vane.

39. (new) The component as claimed in claim 38, wherein the base component is a nickel-base, cobalt-base or iron-base alloy.

40. (new) The component as claimed in claim 39, wherein the thermal barrier coating comprises zirconium oxide (ZrO_2) or titanium oxide (TiO_2).

41. (new) The component as claimed in claim 31, wherein an intermediate protective MCrAlX layer is arranged beneath the thermal barrier coating, where M is at least one element selected from the group consisting of nickel, cobalt and iron, and X is yttrium or silicon or at least one rare earth element.

42. (new) The component as claimed in claim 37, wherein:

the component is exposed to a temperature difference of at least 200°C during operation produced by a higher temperature on one side of the component and a lower temperature on the other side, and

the thermal barrier coating is applied to the higher temperature side of the component to control the thermal deformation of the component.

43. (new) The component as claimed in claim 42, wherein the higher temperature is between 400°C and 800°C.

44. (new) The component as claimed in claim 42, wherein the intermediate protective layer consists of:

11.5 wt% to 20 wt% chromium,

0.3 wt% to 1.5 wt% silicon,

0 wt% to 1 wt% aluminum,

0 to 4 wt% yttrium, and

remainder iron.

45. (new) The component as claimed in claim 44, wherein the intermediate protective layer consists of:

12.5 wt% to 14 wt% chromium,

0.5 wt% to 1.0 wt% silicon,

0.1 wt% to 0.5 wt% aluminum

0 to 4 wt% yttrium, and

remainder iron.

46. (new) The component as claimed in claim 31, the erosion-resistant layer is NiCr80/20 or an iron-base, nickel-base, chromium-base or cobalt-base alloy, or partially comprises chromium carbide.

47. (new) The component as claimed in claim 41, wherein:

the thermal barrier coating is partially porous, or

the thermal barrier coating has a porosity gradient, or

the thermal barrier coating porosity is greatest at an outer surface, or

the thermal barrier coating porosity is lowest in an outer region of the thermal barrier coating, or

the thickness of the thermal barrier varies, or

the thermal barrier coating comprises different materials at different locations.

48. (new) The component as claimed in claim 32, wherein:

the thermal barrier coating is applied in the inflow region and in the blading region of a steam turbine, or

the thermal barrier coating is applied only in the inflow region of a steam turbine, or

the thermal barrier coating is applied only in the blading region of a steam turbine, or

the thermal barrier coating thickness is greater in the inflow region than in the blading region a steam turbine.

49. (new) A turbine component assembly, comprising:

an inner housing having a surface exposed to a high temperature operating environment and an opposite surface exposed to a lower temperature operating environment where the temperature difference between the higher and lower temperature environments is at least 200°C;

an outer housing that surrounds the inner housing;

a ceramic thermal barrier coating applied to the high temperature surface; and

a metallic erosion-resistant layer applied to the thermal barrier coating, the erosion resistant layer having a lower porosity than the thermal barrier coating, where the component is suitable for use up to suitable for long term use at temperatures up to 650°C for long term use.

50. (new) A steam turbine, comprising:

a turbine shaft located coaxially with a axis of rotation of the turbine;

a high-pressure part-turbine and an intermediate-pressure part-turbine;

an inner housing associated with the high-pressure part-turbine and the intermediate - pressure part-turbine where the inner housing has a surface exposed to a high temperature operating environment and an opposite surface exposed to a lower temperature operating environment where the temperature difference between the higher and lower temperature environments is at least 200°C;

an outer housing that surrounds the inner housing;

a ceramic thermal barrier coating applied to the high temperature surface; and

a metallic erosion-resistant layer applied to the thermal barrier coating, the erosion resistant layer having a lower porosity than the thermal barrier coating, where the component is suitable for use up to suitable for long term use at temperatures up to 650°C for long term use.